

Appl. No. 10/590,589  
Reply to Office Action of September 21, 2007

REMARKS/ARGUMENTS

Claim 1 is amended to specify the phosphors for converting blue light into yellow required for the invention specification (see page 6, line 18 through 7, line 5).

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by US2003/0222268 to Yocom et al.

The present invention is for white light emission. Yocom mentions white light only in the background at [0003].

Furthermore, Yocom et al does not show or suggest a specific phosphor capable of converting blue light emitted from a blue LED into yellow origin light.

Yocom et al discloses:

- (1) a mixture of inorganic phosphors activated with Cu or Ag and co-activated with a halide or a trivalent ion (Claim 1);
- (2) a mixture of II-VI phosphors activated with Cu or Ag and co-activated with a halide or a trivalent ion (Claim 2);

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(3) inorganic phosphors selected from the group consisting of solid solutions of ZnS, ZnSe, ZnTe, CdS, CdSe, CdTe, metal silicates, metal aluminum garnet and alumina (Claim 4); and

(4) II-VI phosphors selected from the group consisting of solid solutions of ZnS, ZnSe, ZnTe, CdS, CdSe, CdTe, metal silicates, metal aluminum garnet and alumina (Claim 5).

However, none of the above-described phosphors falls within the scope of the specific phosphor of the present invention capable of converting blue light emitted from a blue LED into yellow origin light to produce white light. The present invention as claimed, in order to produce a white light emitting diode, requires one of the following phosphors to convert blue light emitted from a blue LED into yellow origin light.

1.  $(Y, Gd, Ce)_3Al_5O_{12}$ ;
2. An oxide phosphor in which Zn, Ca, Mg, Sr, Sm or Ga is added into  $(Y, Gd, Pr)Al_5O_{12}$  or  $(Y, Gd, Ce)Al_5O_{12}$ ;
3. A phosphor in which CaS, Ga<sub>2</sub>S<sub>3</sub> or EuS is mixed to be calcined; and
4. A phosphor in which divalent Eu is activated to  $\alpha$ -Si<sub>3</sub>Al<sub>5</sub>O<sub>12</sub>.

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(page 6 line 18 - page 7 line 5 of the present application)  
Therefore, the present claims are not anticipated by  
Yocom et al.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as  
being anticipated by US7102152 to Chua et al.

Claims 6-10 are rejected under 35 U.S.C. 103(a) as being  
unpatentable over US7102152 to Chua et al in view of  
JP2003327961 to Suzuki et al.

Chua is a reference only as defined under 35 USC  
102(e). It therefore is effective only as of its October  
14, 2004 filing date. The present application claims  
priority of JP 2004-061931 of March 5, 2004. Therefore,  
applicants wish to rely on their priority claim to remove  
Chua as a reference.

Enclosed is a translation of the priority application  
including a Statement of Accuracy. Support for the present claims  
is as follows: Independent Claims 2 and 1 of the priority document  
support Claims 1-5 of the present application.

Dependent Claims 4 and 3 of the priority document  
support Claims 6-10 of the present application.

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The discussions at pages 5-6 and the Examples at  
pages 11 et seq. provide additional support.

In view of the above, the rejections are avoided.  
Allowance of the application is therefore respectfully  
requested.

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Enc. Translation of Priority Application